OTHER JOURNALS IN BRIEF

A selection of abstracts of clinically relevant papers from other journals. The abstracts on this page have been chosen and edited by John R. Radford.

ROUTINE ASSESSMENT FOR DENTAL ANXIETY

UK population norms for the modified dental anxiety scale with percentile calculator: adult dental health survey 2009 results

Humphris G, Crawford JR et al. BMC Oral Health 2013; 13: 29 http://www.biomedcentral.com/1472-6831/13/29

Free calculator to provide a read out for a patient's dental anxiety score (www.st-andrews.ac.uk/dentalanxiety/).

The Modified Dental Anxiety Score (MDAS) is a five-item questionnaire. The sum of each item produces a total with a minimum score of 5 (not anxious) to a maximum score of 25 (extremely anxious). MDAS has the distinct advantage of not increasing patient fears when completed. It has been suggested that 'possible additional assistance' may be required to treat a dental patient with a clinically and statistically determined 'cut-off value of 19 and above'. This study interrogated data on 11,382 adults (84% participation) obtained from the Adult Dental Health Survey 2009. MDAS has some evidence of unidimensionality (internal consistency/homogeneity). The investigators report 1) 11.6% of participants had high dental anxiety (score ≥19), 2) females had significantly greater dental anxiety than men, and 3) there was a negative relationship with age (older than 54 years, and there was a decrease 0.7 unit score).

DOI: 10.1038/sj.bdj.2014.12

ALCOHOL SCREENING

Were James Bond's drinks shaken because of alcohol induced tremor?

Johnson G, Guha IN et al. BMJ 2013; 347: f7255

The CAGE questionnaire, an acronym for its four questions, is simple although the Alcohol Use Disorders Identification Test (AUDIT) may be more reliable.

The festive season is over. Indulgences are to be squared. Dental care professionals have an increasing role shaping their patient's lifestyle (see Editor's Summary in 'Summary of: Delivering alcohol screening and alcohol brief interventions within general dental practice: rationale and overview of the evidence' *Br Dent J* DOI: 10.1038/sj.bdj.2011.362). James Bond's alcohol consumption was 92 units each week. He was therefore in the 'highest risk group for malignancies, depression, hypertension, and cirrhosis.' And when screening for alcohol consumption, recent research has reported 'actual consumption could even be double that claimed.' Of course, vodka martinis should be 'shaken, not stirred'. Even if Commander Bond did not have perfect etiquette, he could not have stirred his cocktail because of his likely alcohol-induced tremor! It is noted however, that low doses of alcohol 'can be beneficial in essential tremor'.

DOI: 10.1038/sj.bdj.2014.13

HEALTHCARE INTELLIGENCE – NEURAL NETWORKS

Healthcare intelligence risk detection systems

Safdari R, Farzi J et al. Open J Prev Med 2013; 3: 461-469

As 'decisions on health-care have changed into a vital, complex and unstructured issue', such require plastic solutions.

Is this paper a useful analyse for future decision-making in healthcare, particularly, 'intelligent' ways of risk assessment? Clinical decision support systems are well established in medicine and have been applied to prescribing practices. Support systems, particularly in the field of education have been used in dentistry (J Dent Educ 2004; 68: 589-597). Healthcare intelligence systems adopt tools that have been employed in other, predominately business, fields. Among these are 1) artificial neural networks, that instead of performing tasks as separate entities are carried out together, 2) fuzzy systems that mimic behaviour in the real world, 3) aspect orientated programming that isolates 'cross-cutting concerns' (secondary or supporting roles) from the key function, and 4) expert systems whereby the computer system models the expert, not the programmer. Differences in a treatment approach suggested by the physician and that requested by the patient 'indicate(s) a high level of risk'. DOI: 10.1038/sj.bdj.2014.14

COLOUR - NEURAL NETWORKS

Repeatability and reliability of human eye in visual shade selection

Özat PB, Tuncel I et al. J Oral Rehabil 2013: 40: 958-964

This study reported that 'visual shade-matching protocol is a clinically acceptable and reliable method.'

And this observation was made, despite the subjects not following the shade-matching protocols as recommended by the manufacturer. In this study, the investigators seemed to focus on the lack of repeatability of the human eye. This observation was in contrast to the use of a dental spectrophotometer (VITA Easyshade® VITA Zahnfabrik). Fifty-four dentists were recruited. They recorded the shade of an upper right central incisor tooth of a single subject recorded using 1) the Vita 3D-Master shade guide and 2) the VITA Easyshade®. This was performed twice at a one month interval. Standardised measurement procedures were used and shade tabs were masked. The mean L*, a* and b* values were calculated (L* designates the lightness of the colour, a* designates the amount of red-green colour and b* designates the amount of blue-yellow colour). The investigators state that 'translucency, contour, surface texture, lustre or fluorescence' should be considered during shade-matching. So although the dental spectrometer shows repeatability, the visual shade matching is acceptable.

DOI: 10.1038/sj.bdj.2014.15